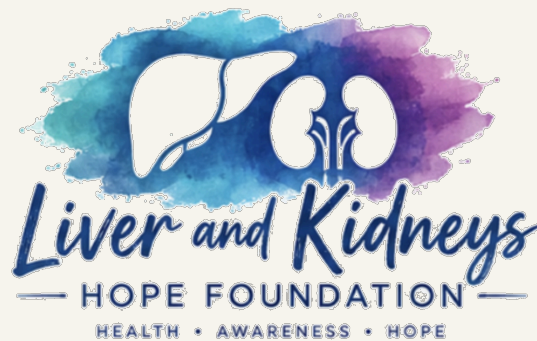




PATIENT & COMMUNITY EDUCATION SERIES

Understanding Liver Failure

A plain-language, comprehensive guide to liver failure — its acute and chronic forms, causes and complications, and the treatments, including transplantation, that can be life-saving.

Written for patients and the families supporting them

Health Education Series · EDU-LIV

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First Edition

Important This guide is provided for general educational purposes only. The Liver and Kidneys Hope Foundation is a nonprofit focused on liver-health education, community support, and outreach — it is **not a medical provider** and does not offer diagnosis, treatment, or medical advice. Nothing here should replace a conversation with a qualified, licensed healthcare professional who knows your history. **If you believe you or someone else is experiencing a medical emergency, call your local emergency services immediately.**

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"Liver failure" is a phrase that covers more than one situation — from a sudden, rare emergency in a previously healthy liver, to the gradual endpoint of long-standing cirrhosis. This guide walks through both, along with the treatments, including transplantation, that offer real hope.

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IF YOU ARE IN CRISIS RIGHT NOW

If you or someone you're with is showing sudden confusion, severe drowsiness, yellowing skin or eyes, or is vomiting blood, **call emergency services immediately** — do not wait to finish reading. If you are having thoughts of harming yourself, the **988 Suicide & Crisis Lifeline** (call or text 988 in the United States) is free, confidential, and available 24/7.

SECTION 1 Your Liver: A Quiet, Hardworking Organ

Before discussing what can go wrong, it helps to appreciate just how much your liver does every day — usually without you noticing at all.

Your liver is the largest solid organ inside your body, weighing roughly 1.4 kg (about 3 pounds) in an adult. Scientists have identified more than **500 distinct functions** it performs: processing nutrients, making bile, managing fats, filtering toxins and medications from the blood, producing clotting proteins, and storing vitamins.

A remarkable capacity to heal — until it's overwhelmed

The liver can regenerate after injury, and it has substantial spare capacity — it can lose a large share of its healthy tissue and still function adequately. **Liver failure** is what happens when this capacity is overwhelmed: either suddenly, by a severe and rapid injury, or gradually, as long-standing scarring finally outpaces what the remaining liver tissue can do. This guide covers both paths.

DID YOU KNOW?

Because the liver has so much reserve capacity, function often doesn't noticeably decline until a very substantial portion of the organ is affected. This is part of why liver failure, in both its acute and chronic forms, can feel sudden to patients and families even when, in the chronic case, the underlying disease had been present for years.

KEY POINT

Liver failure is a serious diagnosis, and this guide does not minimize that. It is also a situation where modern medicine — including intensive medical care and transplantation — has genuinely transformed outcomes. There is real reason for both clear-eyed understanding and hope.

SECTION 2 What Is Liver Failure?

Liver failure means the liver has lost the ability to perform its essential functions well enough to keep the body healthy. It is not one single condition, but a state that can arise from very different starting points.

When the liver fails, several of its core jobs are affected at once: it can no longer adequately clear toxins (leading to confusion), make enough clotting proteins (leading to bleeding risk), process bilirubin (leading to jaundice), or maintain normal blood sugar and fluid balance. These effects, taken together, are what define liver failure clinically, regardless of what caused it.

Two very different roads to the same destination

Liver failure is generally divided into two broad categories, covered fully in Section 3:

- **Acute liver failure** — a rare, sudden, and severe loss of liver function, occurring within days to weeks, typically in a person with no pre-existing liver disease.
- **Chronic liver failure** — the gradual endpoint of long-standing liver disease and cirrhosis, developing over months to years.

A related, distinct situation — **acute-on-chronic liver failure** — occurs when someone with existing chronic liver disease experiences a sudden, severe worsening, often triggered by an infection or other acute event (Section 6).

KEY POINT

Which type of liver failure a person has changes almost everything about their situation — how it developed, how urgently it's treated, and what the path forward looks like. Section 3 lays out these differences clearly.

DID YOU KNOW?

Despite how serious the term sounds, liver failure — in both its acute and chronic forms — is actively treatable, and transplantation, covered in depth later in this guide, offers a genuinely curative option for many patients.

SECTION 3

Acute vs. Chronic Failure: Two Very Different Paths

Understanding this distinction early makes the rest of this guide much easier to follow, since nearly every later section applies specifically to one path or the other.

	Acute liver failure	Chronic liver failure
Starting point	Usually a healthy liver, with no prior liver disease.	Long-standing liver disease, typically with existing cirrhosis.
Timeline	Days to a few weeks.	Months to years, often after years of compensated cirrhosis.
How it presents	Sudden, dramatic, and rare.	Gradual decline, sometimes with a final triggering event.
Setting of care	Intensive care unit, often at a transplant center.	Managed over time, with hospital care during flare-ups (decompensation).
Transplant urgency	Can be extremely urgent — sometimes within days.	Evaluated based on disease severity scores over a longer timeframe.

KEY POINT

If you or a loved one has been told "liver failure," one of the most important early questions to ask is simply: **"Is this acute or chronic?"** The answer shapes everything about the situation and the plan going forward.

DID YOU KNOW?

Acute liver failure is rare — far rarer than chronic liver failure from cirrhosis — but it is a true medical emergency requiring immediate hospital care, which is why Section 4 addresses it first and in detail.

SECTION 4

Acute Liver Failure: A Medical Emergency

Acute liver failure (ALF) is a rare but life-threatening condition in which the liver loses function very rapidly, usually in someone without pre-existing liver disease. It requires immediate hospital care, ideally at a center experienced in liver disease and transplantation.

What defines it

Clinicians generally define acute liver failure as severe liver injury, evidenced by abnormal blood clotting and altered mental function (encephalopathy), developing within days to a few weeks in a person without underlying chronic liver disease. This rapid timeline, in a previously healthy liver, is what distinguishes it from the chronic and acute-on-chronic forms covered later.

THIS IS A MEDICAL EMERGENCY

Acute liver failure can worsen very quickly. Jaundice, confusion, or unusual drowsiness developing rapidly — especially alongside nausea, vomiting, or abdominal pain — warrants **immediate emergency medical care**. Do not wait to see if symptoms improve on their own.

Why urgency matters so much

Because the condition can progress rapidly to multi-organ involvement, people with suspected acute liver failure are typically transferred quickly to a specialized center, often before the full picture is even clear, so that intensive monitoring and, if needed, urgent transplant evaluation can begin without delay.

DID YOU KNOW?

With prompt, specialized care, a meaningful proportion of people with acute liver failure recover their own liver function without needing a transplant, particularly when the cause is identified early and, where possible, specifically treated (Section 15). For others, transplantation becomes the life-saving option.

KEY POINT

Acute liver failure is rare, frightening, and genuinely serious — and it is also a condition where rapid, specialized medical care makes an enormous difference to outcomes. Getting to the right care quickly is the single most important step.

SECTION 5**Causes of Acute Liver Failure**

Understanding the causes of acute liver failure helps explain both why it happens and, in some cases, opens the door to a specific, targeted treatment.

Cause	Brief description
Acetaminophen (paracetamol) toxicity	The single most common cause of acute liver failure in the United States and several other countries, resulting from taking substantially more than the recommended amount — whether unintentionally, through taking multiple products containing it without realizing, or intentionally. Covered further below.
Other drug-induced liver injury	Certain prescription medications, herbal products, and supplements can, rarely, cause severe acute liver injury in susceptible individuals.
Viral hepatitis	Acute infection with hepatitis A, B, or, rarely, other viruses can occasionally cause fulminant liver failure.
Autoimmune hepatitis	Can occasionally present with a sudden, severe flare.
Ischemic injury ("shock liver")	Severe, prolonged low blood pressure or poor blood flow to the liver, often in the context of critical illness.
Rare metabolic and other causes	Including certain inherited conditions and, rarely, pregnancy-related liver disorders.
Unknown cause	In a meaningful share of cases, despite thorough evaluation, no clear cause is ever identified.

A NOTE ON ACETAMINOPHEN

Acetaminophen is safe for most people at recommended doses, but the margin between an effective dose and one that can seriously injure the liver is narrower than for many medications — and that margin narrows further with repeated dosing over several days, with alcohol use, or with pre-existing liver disease. Because it's found in many combination cold, flu, and pain products, it's possible to unintentionally exceed safe limits without realizing it. If you suspect anyone has taken more than the recommended amount of acetaminophen — accidentally or otherwise — **seek emergency medical care immediately, or contact Poison Control (1-800-222-1222 in the United States), even if the person feels fine.** An effective antidote exists and works best when given early, often before serious symptoms even appear.

IF YOU ARE STRUGGLING WITH THOUGHTS OF SELF-HARM

If you are having thoughts of harming yourself, please know that support is available and you are not alone. The **988 Suicide & Crisis Lifeline** (call or text 988 in the United States) is free, confidential, and available 24/7.

KEY POINT

Identifying the cause of acute liver failure is one of the very first priorities in the hospital, since some causes have a specific antidote or treatment that can make a significant difference to outcomes.

SECTION 6 Acute-on-Chronic Liver Failure

This distinct situation occurs when someone with existing chronic liver disease experiences a sudden, severe decline — combining the vulnerability of a chronically damaged liver with the urgency of an acute crisis.

What it is

Acute-on-chronic liver failure (ACLF) describes a rapid worsening of liver function in a person who already has chronic liver disease, often cirrhosis, frequently accompanied by failure of one or more other organs (such as the kidneys or lungs). It is increasingly recognized as its own distinct clinical entity, separate from a routine "flare" of chronic disease.

Common triggers

- **Infections**, including spontaneous bacterial peritonitis and other serious infections — among the most common triggers.
- **Gastrointestinal bleeding**, such as from variceal bleeding.
- **Continued or resumed alcohol use**, in those whose chronic disease is alcohol-related.
- **Certain medications** or new drug-induced liver injury on top of existing disease.
- Sometimes, **no clear trigger** is identified.

THIS REQUIRES URGENT HOSPITAL CARE

Rapid worsening of confusion, jaundice, or abdominal swelling in someone with known cirrhosis can indicate acute-on-chronic liver failure and warrants prompt emergency evaluation.

KEY POINT

Because ACLF often involves other organs alongside the liver, it typically requires intensive, coordinated hospital care. Identifying and treating the trigger — most often an infection — is a central part of management, alongside supporting the affected organs.

DID YOU KNOW?

With prompt, intensive treatment of the underlying trigger, some people with ACLF can recover meaningfully — underscoring why rapid recognition and hospital care make such a significant difference.

SECTION 7

Chronic Liver Failure: The End Stage of Cirrhosis

Chronic liver failure describes the gradual loss of liver function that can develop over years of cirrhosis, particularly once the liver becomes "decompensated." This is the path most commonly meant when people refer to "end-stage liver disease."

How it develops

As covered in our companion cirrhosis guide, cirrhosis can remain "compensated" for years, with the liver still managing its essential functions. Chronic liver failure describes what happens as this compensation breaks down over time — with declining synthetic function (fewer clotting factors, less albumin), worsening portal hypertension, and recurring or persistent complications such as ascites, variceal bleeding, and hepatic encephalopathy.

A gradual, but not always steady, decline

Chronic liver failure doesn't always progress in a straight line. Many people experience periods of relative stability punctuated by episodes of decompensation — often triggered by an infection or other stress on the body — with some recovery of function between episodes, at least earlier in the disease course. Over time, these episodes tend to become more frequent or severe.

KEY POINT

Chronic liver failure is not a single event but a process, often with ups and downs along the way. Understanding roughly where someone sits in that process — through markers like MELD score, covered in Section 10 — helps guide the intensity of monitoring and the timing of transplant evaluation.

DID YOU KNOW?

Because chronic liver failure most often results from cirrhosis, treating the underlying cause of cirrhosis — where still possible — remains relevant even at this stage, and can sometimes meaningfully slow further decline.

SECTION 8 How Common Is Liver Failure?

The two forms of liver failure differ enormously in how common they are — one is genuinely rare, the other reflects the natural endpoint of a very common set of chronic conditions.

Acute liver failure: rare

Acute liver failure is uncommon, affecting a comparatively small number of people each year in most countries, which is part of why care is often centralized at specialized liver or transplant centers with the experience to manage it.

Chronic liver failure: a natural extension of cirrhosis

Given how common cirrhosis has become globally — driven increasingly by MASLD/MASH alongside alcohol-related disease and viral hepatitis, as covered in our companion cirrhosis guide — chronic liver failure and its complications represent one of the more significant causes of serious illness and the need for liver transplantation worldwide.

DID YOU KNOW?

Liver transplantation volumes have risen in recent decades, reflecting both improved surgical and post-transplant care and the growing number of people reaching advanced, decompensated cirrhosis — making ongoing organ donation awareness genuinely important to the patients waiting.

KEY POINT

Whether rare and sudden, or common and gradual, liver failure in both forms is met today with far more effective treatment options than even a generation ago.

SECTION 9 Signs & Symptoms

The signs of liver failure reflect the liver's core functions breaking down — and while acute and chronic failure develop very differently, the symptoms that emerge often overlap.

Common signs across both forms

- **Jaundice** — yellowing of the skin and eyes.
- **Confusion, disorientation, or personality change** (hepatic encephalopathy, Section 11).
- **Easy bruising or bleeding** (Section 12).
- **Abdominal swelling** (ascites) or swelling of the legs.

- **Nausea, vomiting, and loss of appetite.**
- **Extreme fatigue.**

How the picture differs

In **acute liver failure**, these symptoms emerge and can worsen dramatically over days, often in someone who felt completely healthy shortly before. In **chronic liver failure**, these same symptoms typically build more gradually, often against a backdrop of known cirrhosis, sometimes worsening suddenly during an episode of decompensation.

SEEK EMERGENCY CARE IMMEDIATELY

Vomiting blood, black tarry stools, rapidly worsening confusion, difficulty waking someone, or new jaundice developing quickly are all reasons to seek **emergency medical care right away** — in either acute or chronic liver failure.

KEY POINT

Because these symptoms can escalate quickly, especially in acute liver failure, err on the side of seeking care sooner rather than waiting to see if things improve.

SECTION 10

How Liver Failure Is Diagnosed & Assessed

Diagnosing liver failure combines blood tests, imaging, and a careful assessment of timeline and history — since distinguishing acute from chronic failure, and identifying the cause, directly shapes treatment.

Key blood tests

- **INR (a measure of blood clotting)** — a hallmark of liver failure is the liver's reduced ability to make clotting factors, reflected in a prolonged INR.
- **Bilirubin** — elevated levels cause jaundice and reflect the liver's reduced ability to process this waste product.
- **Liver enzymes (ALT, AST)** — often very high in acute liver failure, reflecting active, severe cell injury.
- **Ammonia level** — can help assess the risk of encephalopathy, alongside clinical examination.
- **Kidney function and electrolytes** — since other organs are often affected.
- **Tests to identify the cause**, including acetaminophen levels, viral hepatitis panels, and autoimmune markers.

Scoring systems used to assess severity

The **MELD score** (Model for End-Stage Liver Disease), calculated from bilirubin, creatinine, and INR, is widely used in chronic liver failure to estimate short-term risk and help prioritize transplant candidates. In acute liver failure, specific criteria (such as the King's College Criteria) help guide urgent decisions about transplant need.

Imaging

Ultrasound, CT, or MRI may be used to assess liver size and structure, look for underlying cirrhosis, check blood flow, and screen for complications or alternative explanations.

TALK WITH YOUR CLINICIAN

Worth asking directly: "Is this acute, chronic, or acute-on-chronic liver failure?" "What is my (or my loved one's) current MELD score?" and "What would change our current plan?"

SECTION 11 Complications: Encephalopathy

Hepatic encephalopathy — confusion caused by the liver's reduced ability to clear certain toxins — is one of the defining features of liver failure, in both its acute and chronic forms.

What it looks like

- **Milder forms** may show as subtle changes in concentration, sleep patterns, or mood.
- **More noticeable episodes** can include confusion, personality change, slowed or slurred speech, a flapping hand tremor (asterixis), and excessive sleepiness.
- **Severe cases**, particularly in acute liver failure, can progress to significant unresponsiveness and swelling within the brain (cerebral edema), a serious complication managed intensively in a hospital setting.

How it's managed

- **Lactulose**, a laxative medication that helps clear ammonia-producing substances from the gut, is a mainstay treatment, dosed to produce a specific number of bowel movements per day as directed.
- **Rifaximin**, an antibiotic reducing ammonia-producing gut bacteria, is often added, particularly in chronic liver failure.
- **Identifying and treating triggers**, such as infection, bleeding, or constipation.
- **In acute liver failure**, intensive monitoring for and management of brain swelling is a central part of specialized hospital care.

WHEN TO SEEK URGENT CARE

New or worsening confusion, disorientation, or difficulty waking someone warrants prompt medical attention — treatment works best when started early, and rapid worsening can occur.

DID YOU KNOW?

Family members and caregivers are often the first to notice subtle changes in mood, sleep, or thinking that can signal early encephalopathy — their observations are genuinely valuable information for the care team.

SECTION 12

Complications: Bleeding & Clotting Problems

A failing liver produces fewer of the proteins needed for normal blood clotting, which, combined with other changes, creates a genuinely complex bleeding and clotting picture.

Why bleeding risk rises

The liver normally produces most of the body's clotting factors. As liver function declines, levels of these factors drop, which is reflected in a rising INR — one of the key blood tests used to gauge liver failure severity (Section 10). This can increase the risk of bruising and bleeding, including from varices in those with underlying cirrhosis and portal hypertension.

A more complex picture than "just" bleeding risk

Interestingly, research over the past couple of decades has shown that liver failure doesn't simply create a straightforward bleeding tendency — the balance between clotting and anti-clotting factors is often disrupted in both directions, meaning some patients can also be at risk of forming inappropriate blood clots. This complexity is part of why decisions around blood thinning medications or blood product transfusions in liver failure are made carefully, by specialists familiar with this nuanced picture.

How it's managed

Management is highly individualized and may include vitamin K, specific blood product transfusions in certain situations, and treatment aimed at the underlying cause of bleeding (such as endoscopic treatment for variceal bleeding, covered in our companion cirrhosis guide).

SEEK EMERGENCY CARE FOR ACTIVE BLEEDING

Vomiting blood, passing black or tarry stools, or bleeding that won't stop are medical emergencies requiring immediate care.

KEY POINT

Bleeding and clotting management in liver failure is genuinely specialized. This is not an area for general advice — it requires a hematologist or hepatologist familiar with the specific, sometimes counterintuitive balance involved.

SECTION 13

Complications: Infections & Multi-Organ Effects

Liver failure affects far more than the liver itself. Understanding its wider reach helps explain why care so often involves an entire team, not a single specialist.

Increased infection risk

Liver failure significantly impairs immune function, making infections — including spontaneous bacterial peritonitis, pneumonia, and bloodstream infections — both more likely and potentially more serious. Infections are also one of the most common triggers for acute-on-chronic liver failure (Section 6), which is why they are watched for and treated urgently.

Kidney effects

Advanced liver failure can significantly affect kidney function, in some cases leading to a serious complication called hepatorenal syndrome. Kidney function is monitored closely alongside liver function.

Circulatory and lung effects

Liver failure can affect blood pressure regulation and, in some cases, oxygen levels via effects on blood vessels within the lungs, requiring careful monitoring, particularly in intensive care settings.

Metabolic effects

Blood sugar regulation, nutrient processing, and electrolyte balance can all be disrupted, requiring close monitoring and correction as part of overall care.

KEY POINT

Because liver failure can involve so many other organ systems, care — especially in acute liver failure or acute-on-chronic liver failure — is typically delivered by a multidisciplinary intensive care team, not the liver specialist alone.

DID YOU KNOW?

This multi-organ involvement is part of why acute liver failure and severe decompensation are managed in intensive care units — the level of monitoring and rapid intervention needed exceeds what a general hospital ward typically provides.

SECTION 14

Treatment & Management: The Big Picture

Treatment for liver failure depends enormously on whether it's acute, chronic, or acute-on-chronic — but a few overarching principles apply across all three.

Principle 1 — Identify and treat the cause, where possible

Whether it's stopping a causative medication, treating a triggering infection, or curing an underlying viral infection, addressing the root cause is central to every form of liver failure.

Principle 2 — Support the body while the liver recovers or is replaced

This includes managing encephalopathy, bleeding risk, infections, and effects on other organs — supportive care that buys time for either the native liver to recover, or for transplantation to become possible.

Principle 3 — Intensive, specialized monitoring

Both acute liver failure and advanced chronic liver failure typically require care at, or in close coordination with, a specialized liver or transplant center.

Principle 4 — Transplant evaluation, where appropriate

For many patients, especially those who don't recover adequate liver function with supportive care alone, liver transplantation becomes the definitive, life-saving treatment (Sections 17–18).

A WORD OF CAUTION

Treatment specifics for liver failure are highly individualized and often urgent. **This guide cannot recommend specific treatments.** These decisions belong entirely with the specialized medical team caring for you or your loved one.

KEY POINT

Liver failure care moves quickly and involves many moving parts. Trusting your care team, asking questions as they arise, and leaning on the support described in Section 20 all help you navigate it.

SECTION 15 Treating Acute Liver Failure

Treatment for acute liver failure combines intensive supportive care with, where possible, a specific treatment aimed at the underlying cause.

Cause-specific treatment

- **Acetaminophen toxicity** has a specific antidote, N-acetylcysteine, which works best when given early and can prevent or limit liver injury.
- **Certain viral or autoimmune causes** may have specific antiviral or immune-modulating treatments.
- When **no specific cause** is identified, or no specific treatment exists, care focuses entirely on intensive supportive management.

Intensive supportive care

This typically includes close monitoring for and management of encephalopathy and brain swelling, support for blood pressure and kidney function, careful management of blood sugar and electrolytes, infection prevention and prompt treatment, and correction of clotting abnormalities when actively bleeding or before procedures.

Continuous transplant readiness

Because acute liver failure can progress so quickly, transplant evaluation often begins early and in parallel with supportive treatment — not as a last resort, but as a readiness measure, in case the liver does not recover on its own.

DID YOU KNOW?

Specialized scoring systems help the care team continuously reassess whether a person is likely to recover their own liver function or is likely to need transplantation, allowing this urgent decision to be revisited as new information comes in, sometimes hour by hour.

KEY POINT

Acute liver failure is treated with real urgency and real hope — many patients do recover, and for those who don't, transplantation offers a genuine, life-saving path forward.

SECTION 16

Treating Chronic Liver Failure & Decompensation

Managing chronic liver failure centers on treating each complication as it arises, continuing to address the underlying cause where possible, and monitoring closely for signs that transplant evaluation should begin.

Managing individual complications

Our companion cirrhosis guide covers these in depth: managing ascites with sodium restriction and diuretics, preventing and treating variceal bleeding, and managing hepatic encephalopathy with lactulose and related treatments. In chronic liver failure, these treatments continue, often needing more frequent adjustment as the disease progresses.

Continuing to treat the underlying cause

Where the original cause of cirrhosis remains treatable — for example, alcohol cessation, antiviral treatment for hepatitis, or improved metabolic health — continuing this treatment remains relevant, and can sometimes meaningfully slow further decline, even at this advanced stage.

Recognizing the shift toward transplant evaluation

Certain signs generally prompt more active transplant evaluation: a rising MELD score, recurrent episodes of decompensation despite treatment, or complications that significantly affect quality of life. This is covered in Section 18.

KEY POINT

Chronic liver failure is managed as an ongoing, evolving situation — not a single crisis to resolve once. Regular, close follow-up with a hepatologist is central to catching the right moment for escalating care.

TALK WITH YOUR CLINICIAN

It's reasonable to ask directly: "Based on my current situation, should we be starting transplant evaluation now, or is it too early?"

SECTION 17

Liver Transplantation: The Definitive Treatment

For many people with advanced liver failure, whether acute or chronic, liver transplantation offers something no other treatment can: a genuine chance to return to a full, healthy life.

What transplantation involves

Liver transplantation replaces the failing liver with a healthy one, from either a deceased donor or, in some situations, a portion of liver from a living donor (typically a family member or other well-matched volunteer) — made possible by the liver's remarkable capacity to regenerate in both donor and recipient.

Why it can be so effective

Unlike supportive treatments that manage the effects of a failing liver, transplantation addresses the root problem directly, by replacing the organ itself. For eligible patients, it can resolve the complications covered throughout this guide and offer a return to normal daily function.

DID YOU KNOW?

Liver transplant outcomes have improved substantially over recent decades. Many recipients live full, active lives for many years afterward, with long-term success depending heavily on consistent anti-rejection medication and ongoing follow-up care.

Life after transplant

Recipients take anti-rejection (immunosuppressant) medications, typically for life, and require regular follow-up to monitor liver function and watch for medication side effects or complications. Most people are able to gradually return to work, hobbies, and daily activities as recovery progresses.

KEY POINT

Transplantation is major surgery with real risks and a genuine recovery process — but for the right candidate, at the right time, it offers the closest thing to a cure that liver failure has.

SECTION 18 Being Evaluated & Listed for Transplant

Getting listed for a liver transplant involves a thorough evaluation process, designed to ensure the best possible outcome from a scarce, life-saving resource.

What the evaluation covers

- **Overall health**, including heart, lung, and kidney function, and screening for other conditions that could affect surgical risk or recovery.
- **The severity and cause of liver disease**, including MELD score and specific complications.
- **Psychosocial support**, including a person's support system and, where relevant, their relationship with alcohol and plans for sustained abstinence, as our companion ALD guide describes in depth.
- **Practical readiness**, such as reliable transportation and support for the demanding post-transplant follow-up schedule.

How organs are allocated

Donor livers are allocated largely based on MELD score and other clinical priorities, meaning wait times vary considerably and depend on how sick a person is relative to others waiting. In acute liver failure, separate, more urgent listing criteria apply, reflecting how quickly the situation can change.

While waiting

During the waiting period, ongoing management of complications, regular reassessment, and close communication with the transplant team continue. Staying in close contact with the transplant center, and promptly reporting any change in symptoms, is an important part of a patient's own role during this time.

TALK WITH YOUR TRANSPLANT TEAM

Every transplant center has its own specific evaluation process and criteria. If transplant is being considered, ask directly what your center's process involves and what you can do, practically, while waiting.

DID YOU KNOW?

Living donor liver transplantation is an option in some situations, potentially shortening wait times significantly for eligible recipients with a suitable, willing donor.

SECTION 19 Nutrition, Medications & Daily Life

Nutrition and medication safety take on particular importance in liver failure, given how little reserve capacity remains.

Nutrition

Malnutrition and muscle loss are common in chronic liver failure and can affect recovery and outcomes. Adequate protein and calorie intake, frequent smaller meals, and attention to specific needs like sodium restriction (with ascites) are generally recommended, individualized by a dietitian experienced in liver disease.

Medications requiring particular caution

- **Acetaminophen** requires specific guidance from your care team on safe amounts, if any, given the reduced liver reserve.
- **NSAIDs** (such as ibuprofen) are generally avoided, given effects on kidney function and bleeding risk.
- **Sedatives** can worsen encephalopathy and are used with particular caution.

- Every new medication, including over-the-counter products and supplements, should be checked with your care team first.

AVOID "LIVER DETOX" AND UNREGULATED SUPPLEMENTS ENTIRELY

With liver failure, there is essentially no reserve capacity to safely process an unregulated product. **Do not take any supplement or herbal product without explicit approval from your care team.**

Daily life adjustments

Depending on severity, daily life may involve dietary restrictions, medication schedules, frequent appointments, and, for some, significant fatigue affecting activity levels. Many patients find that pacing activity, accepting help, and staying closely connected with their care team makes daily life more manageable.

TALK WITH YOUR CARE TEAM

Ask specifically about your individual dietary targets, which medications are safe for you, and what daily activity level is appropriate for your current situation.

SECTION 20

Support for Patients & Families

A liver failure diagnosis is one of the most emotionally demanding experiences a patient and their family can face. Caring for emotional wellbeing alongside medical treatment is not a luxury — it's a genuine, important part of getting through this.

For patients

Fear, grief, anger, and uncertainty are all completely understandable responses. Many people find it helpful to ask their care team directly and repeatedly about what to expect, to lean on people they trust, and to allow themselves to feel however they feel without judgment.

For family members and caregivers

Supporting someone through liver failure — whether a sudden acute crisis or a long chronic decline — is exhausting, frightening, and disorienting. Caregivers often neglect their own needs during this time; accepting practical help from others, seeking your own support (including counseling), and pacing yourself for what can be a long road all matter.

Palliative and supportive care

For some patients, particularly when transplantation isn't an option or complications are especially difficult to manage, palliative care teams can provide an additional layer of support — focused on comfort, symptom management, and quality of life, alongside (not instead of)

ongoing liver-directed treatment. This is a conversation worth having openly with your care team if it feels relevant to your situation.

IF YOU ARE STRUGGLING

If you are experiencing persistent low mood, hopelessness, or thoughts of harming yourself — whether as a patient or a caregiver — please reach out to a healthcare professional or a crisis line. The **988 Suicide & Crisis Lifeline** (call or text 988 in the United States) is free, confidential, and available 24/7. You do not have to manage this alone.

COMMUNITY MATTERS

Connection is protective, for patients and families alike. Support groups — including those specifically for transplant patients and caregivers · and organizations like The Liver and Kidneys Hope Foundation exist so that no one has to face this alone.

SECTION 21 Prevention & Myths vs. Facts

While not every case of liver failure is preventable, several genuinely protective steps exist — particularly for the more common, chronic path.

Prevention

- **Follow medication instructions carefully**, especially with acetaminophen, and check with a pharmacist before combining products that might both contain it.
- **Treat underlying liver conditions early** — MASLD/MASH, viral hepatitis, and alcohol-related disease — rather than waiting for advanced symptoms.
- **Attend regular monitoring** if you have cirrhosis, so decompensation and its triggers are caught early.
- **Get vaccinated** against hepatitis A and B where appropriate.
- **Seek support early** for alcohol use that feels difficult to control.

Myths vs. facts

Myth	Fact
"Liver failure always happens gradually, over years."	Acute liver failure can develop within days in a previously healthy liver — it's rare, but genuinely sudden.
"Once the liver fails, nothing can be done."	Supportive treatment, treating the underlying cause, and transplantation all offer real, often life-saving options.
"Only heavy drinkers develop liver failure."	Liver failure can result from many causes, including medication toxicity, viral hepatitis, MASLD/MASH, and autoimmune conditions.
"A liver transplant is a last resort with poor outcomes."	Many transplant recipients live full, active lives for many years — it is genuinely one of the most successful transplant procedures in medicine.
"Taking a little extra acetaminophen now and then is harmless."	The margin between a safe and a liver-damaging amount is narrower than many people realize, especially with repeated dosing or alcohol use.

KEY POINT

If you remember one thing from this page: liver failure, in either form, is a serious diagnosis met by serious, effective medical care — including a transplant system that has transformed outcomes for many thousands of patients.

CLOSING

Questions, Glossary, Resources & Disclaimer

Questions you might ask your care team

- Is this acute, chronic, or acute-on-chronic liver failure?
- Has a specific cause been identified, and is there a targeted treatment for it?
- What is my (or my loved one's) current MELD score, and how does it guide our plan?
- Should we be starting a transplant evaluation now?
- What symptoms should prompt us to call, or go to the emergency room, right away?
- What support is available for me as a caregiver during this time?

Glossary

Term	Plain-language meaning
Acute liver failure (ALF)	Rapid, severe loss of liver function over days to weeks, usually in a previously healthy liver.
Acute-on-chronic liver failure (ACLF)	A sudden, severe worsening of liver function in someone with existing chronic liver disease.
Decompensation	The point at which a previously stable cirrhotic liver can no longer keep up, causing major complications.
Hepatic encephalopathy	Confusion caused by toxins the liver can no longer adequately clear.
INR	A blood test measuring clotting ability; often elevated in liver failure.
MELD score	A scoring system estimating short-term risk in liver disease, used to help prioritize transplant candidates.
N-acetylcysteine	The specific antidote used for acetaminophen-related liver injury.

About The Liver and Kidneys Hope Foundation

The Liver and Kidneys Hope Foundation (TLHF) is a Nevada-based 501(c)(3) nonprofit dedicated to liver-health education, community support, and outreach. Through educational materials like this guide, community programming, our chapter network, volunteer efforts, and fundraising initiatives, we work to raise awareness of liver conditions and support the people affected by them, including those facing liver failure and their families. The Foundation is not a medical provider and does not deliver clinical care.

A NOTE ON SOURCES AND CURRENCY

This guide reflects widely accepted, general medical understanding of liver failure intended for patient education. It does not cite individual studies, and practices around transplant criteria and critical care continue to evolve. For the most current, individualized information, your specialized care team is the best resource.

Full disclaimer

PLEASE READ

This publication is provided by The Liver and Kidneys Hope Foundation for **general educational purposes only**. It is **not medical advice** and is not a substitute for professional diagnosis, treatment, or the judgment of a qualified, licensed healthcare provider who knows your personal history. The Liver and Kidneys Hope Foundation is **not a medical provider** and does not practice medicine, provide clinical services, or establish a provider-patient relationship through this material.

Do not use this guide to diagnose or treat a health problem or disease, and do not disregard or delay seeking professional medical advice because of something you have read here. **Liver failure, in any form, can be a medical emergency.** Jaundice, confusion, vomiting blood, black tarry stools, or suspected medication overdose of any kind require immediate emergency medical care — contact your local emergency services, or Poison Control (1-800-222-1222 in the United States), right away.

The Foundation makes no warranties about the completeness, accuracy, or currency of this information and accepts no liability for actions taken based on it. Always consult your own healthcare professional.

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